

REMARKS

Applicants respectfully request reconsideration of the present application. No new matter has been added to the present application. Claims 1-10 and 12-31 have been rejected in the Office Action. Claims 1, 5, 8, 13-15, 18, 19, 25, 27, and 31 have been amended, and no claims have been canceled or added in this Amendment. Accordingly, claims 1-10 and 12-31 are pending herein. Claims 1-10 and 12-31 are believed to be in condition for allowance and such favorable action is respectfully requested.

Interview Summary

Applicants' representative thanks the Examiner for conducting an interview on April 28, 2008. During the interview, potential amendments to the claims to put the claims in condition for allowance were discussed. Additionally, the Examiner suggested reviewing and amending the dependent claims to address potential antecedent basis issues.

Amendments to the Claims

Claims 1, 5, 8, 13-15, 18, 19, 25, 27, and 31 have been amended herein. Care has been exercised to avoid the introduction of new matter. Amendments to claims 5, 8, 13-15, 18, 19, and 27 include minor corrections. Support for the amendments to claims 1, 25, and 31 may be found in the Specification as filed, for instance, at p. 14, line 15 – p.15, line 3 and p. 16, lines 18-20.

Rejections based on 35 U.S.C. § 103

A. Applicable Authority

Title 35 U.S.C. § 103(a) declares, a patent shall not issue when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter

as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The Supreme Court in *Graham v. John Deere* counseled that an obviousness determination is made by identifying: the scope and content of the prior art; the level of ordinary skill in the prior art; the differences between the claimed invention and prior art references; and secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

To support a finding of obviousness, the initial burden is on the Office to apply the framework outlined in *Graham* and to provide some reason, or suggestions or motivations found either in the prior art references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the prior art reference or to combine prior art reference teachings to produce the claimed invention. See, *Application of Bergel*, 292 F. 2d 955, 956-957 (1961). Thus, in order “[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success [in combining the references]. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” See MPEP § 2143. Recently, the Supreme Court elaborated, at pages 13-14 of *KSR*, it will be necessary for [the Office] to look at interrelated teachings of multiple [prior art references]; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by [one of] ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the [patent application].” *KSR v. Teleflex*, 127 S. Ct. 1727 (2007).

B. Rejections based on Rakavy and Sawyer

Claims 1-9, 14-27, and 29-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,913,040 by Rakavy et al. (the “Rakavy reference”) in view of U.S. Patent No. 5,828,737 to Sawyer (the “Sawyer reference”). Applicants respectfully traverse the obviousness rejection for claims 1-9, 14-27, and 29-31 as hereinafter set forth.

1) Claims 1-9, 14-21, 29, and 30

Independent claim 1 is directed to a method of transferring a set of data over a network between a local computing device and a remote computing device. In accordance with the method of claim 1, the level of actual network bandwidth utilization of a communications interface providing a network connection for the local computing device is monitored by periodically sampling, at the communications interface, an amount of incoming and outgoing data transferred over a given time period. *Id.* at p. 14, lines 15-20. A maximum of the monitored level of actual network bandwidth utilization of the communications interface is identified when one or more data sets transferred over the communication interface are greater than a predetermined data size threshold. *Id.* at p. 16, lines 8-12. A threshold level of utilization is then calculated as a function of the maximum monitored level of actual network bandwidth utilization. *Id.* at p. 16, lines 12-17. Based on a determination that the actual level of network bandwidth utilization is less than the threshold level, at least a portion of the set of data is transferred over the network between the local computing device and the remote computing device. *Id.* at p. 17, lines 4-14.

Initially, Applicants note that claim 1 has been amended herein to recite features indicated by the Examiner in the Office Action as allowable subject matter. In particular, claim 1 has been amended to recite “monitoring the level of actual network bandwidth utilization of a

communications interface providing a network connection for the local computing device by periodically sampling, at the communications interface, an amount of incoming and outgoing data transferred over a given time period;” and “identifying a maximum monitored level, wherein the maximum monitored level is a maximum of the monitored level of actual network bandwidth utilization of the communications interface, and wherein the maximum monitored level is identified when one or more data sets transferred over the communication interface are greater than a predetermined data size threshold.” These recitations correspond with the description in the Specification at page 14, line 15 to page 15, line 3. Because claim 1 has been amended to recite the features indicated as allowable subject matter, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of independent claim 1 and allowance of the claim.

Additionally, Applicants respectfully submit that the Rakavy and Sawyer references fail to render the invention of claim 1 obvious for at least the reasons set forth below.

In contrast to the invention of claim 1, the Rakavy reference discusses a type of software technology that is referred to as a “Polite Agent.” *Rakavy*, col. 13, lines 5-6. The Polite Agent “transmits information during periods of low line utilization.” *Id.* at col. 13, lines 11-12. “Low line utilization occurs when the communications line is busy no more than a predetermined percentage of the time.” *Id.* at col. 13, lines 35-36. At a point when “the communications resource utilization remains low and ample resources are available the software agent performs its designated data transfer task.” *Id.* at col. 13, lines 23-25.

Although Rakavy’s method and the invention of claim 1 address essentially the same problem, there are significant differences between the two approaches with respect to how a threshold below which data may be transferred is established. In particular, the “Polite Agent”

software technology discussed in the Rakavy reference uses a predetermined percentage of time that a communications line is busy as a threshold (*see, e.g., Rakavy*, col. 13, lines 35-44), while the invention in claim 1 uses a threshold level calculated based on a maximum monitored level of actual network bandwidth utilization. The Rakavy reference fails to teach or suggest “identifying a maximum monitored level, wherein the maximum monitored level is a maximum of the monitored level of actual network bandwidth utilization” and “calculating a threshold level of utilization as a function of the maximum monitored level of utilization.” Following from its failure to teach or suggest calculating a threshold level based on a maximum monitored level of actual network bandwidth utilization, the Rakavy reference necessarily also fails to teach or suggest the last element: “based on a determination that the actual level is less than the threshold level, receiving at least a portion of the set of data over the network.”

The differences between the approach in the Rakavy reference and the invention of claim 1 are significant. Instead of relying on the percentage of time that a communications line is busy as in the Rakavy reference, the method of claim 1 includes identifying a maximum monitored level of actual network bandwidth utilization and using that maximum monitored level to calculate a threshold level below which data may be received. As such, the invention of claim 1 provides a substantial advantage over the Rakavy reference’s solution in that the invention of claim 1 optimizes the use of network bandwidth. By contrast, the Rakavy reference’s solution is less effective because downloading data based on the percentage of time the network connection is busy will often result in underutilization of the network bandwidth (as explained in Applicants’ specification at page 16, line 18 through page 17, line 1).

The Examiner has acknowledged that the Rakavy reference fails to disclose multiple limitations of the invention of claim 1 (*see, e.g., Office Action dated 1/10/2008*, p. 3),

but has minimized the extent of the differences between the Rakavy reference and claim 1. As set forth by the United States Supreme Court in *Graham v. John Deere*, 383 U.S. 1 (1966), inquiries as a background for determining obviousness include, *inter alia*, determining the scope and contents of the prior art, and ascertaining the differences between the prior art and the claims at issue. *See, e.g.*, MPEP § 2141. In the present case, the Examiner has not adequately ascertained the differences between the Rakavy reference and the invention of claim 1. The approach in Rakavy does not involve identifying a maximum monitored level of actual bandwidth utilization, using that maximum monitored level to calculate a threshold level, and transferring data when the actual bandwidth utilization is less than that calculated threshold level. Rather, the Rakavy reference teaches a different approach based on the percentage of time the network connection is busy. Rakavy's approach is a less effective one for the reasons stated above and in Applicants' specification at page 16, line 18 through page 17, line 1. Thus, the Applicants' claimed invention advances the state of the art beyond what is taught in the Rakavy reference.

The Sawyer reference was cited by the Examiner in an attempt to demonstrate that the differences between the invention of claim 1 and the Rakavy reference were merely obvious differences. However, the Examiner's conclusion is based on not only an incorrect understanding of claim 1 as noted above, but also an incorrect understanding of what is taught in the Sawyer reference.

The Sawyer reference relates to a system for determining billing for communications services such as those provided by cellular communications systems. *See, e.g., Sawyer*, Abstract. In Sawyer, subscribers are charged based on the total amount of bandwidth used for the subscribers' communications. *See, e.g., id.*, Abstract, col. 1, lines 6-11. Bandwidth

usage measurements are made during predetermined time intervals of a communication, and the maximum amount of bandwidth used during each time interval is identified. *See, e.g., id.*, col. 2, lines 12-14, col. 5, lines 34-42. The maximum amounts are then summed to estimate a total bandwidth usage amount, which is multiplied by a charging rate to derive a charging amount for the communication. *See, e.g., id.*, col. 5, lines 47-54.

Initially, Applicants note that the Sawyer reference simply does not teach or suggest any steps related to “identifying a maximum monitored level, wherein the maximum monitored level is a maximum of the monitored level of actual bandwidth utilization of the local computing device” and “calculating a threshold level of utilization [below which data may be transferred as indicated by the last element of claim 1] as a function of the maximum monitored level of utilization” as recited by claim 1. The Examiner appears to be either misinterpreting the Sawyer reference or taking what the Applicants have taught in the present application and attempting to read these limitations into the Sawyer reference. As noted hereinabove, claim 1 is concerned with transferring data in a manner that minimizes interference with other data transmissions, and, as the threshold for the data transfer is based on the maximum monitored level of utilization, the data transfer can take advantage of otherwise unused bandwidth with minimal impact on other network traffic. In contrast, the Sawyer reference is not concerned with transmitting data in the background of other data transmissions. Instead, the Sawyer reference is concerned with monitoring a communication for determining billing amounts. Determining billing charges based on a total amount of bandwidth used for a communication as in the Sawyer reference is significantly different from the recited limitations of independent claim 1.

The invention of claim 1 employs a threshold level of utilization at which interference with other network activity caused by a background data transmission will be

minimized. In particular, claim 1 sets the threshold level of utilization below an identified maximum monitored level of utilization to ensure that there is sufficient bandwidth to allow background data transmission while minimizing interference with other data transmissions. In contrast, the Sawyer reference discusses identifying maximum amounts of bandwidth used during a number of predetermined intervals of a communication and sums those amounts to estimate a total amount of bandwidth used during the communication. See, e.g., *id.*, col. 5, lines 34-54. By estimating the total amount of bandwidth used in this manner, the Sawyer reference can calculate billing charges based on the estimate of total bandwidth used.. See, e.g., *id.* col. 5, lines 50-54. Clearly, this is different from the invention of claim 1 in which a threshold value is determined based on a maximum monitored level of utilization for a communications interface and used to determine whether a background data transmission may occur with minimal interference with other data transmissions.

Moreover, there is no apparent reason why one skilled in the art at the time of the invention of claim 1 would have combined or otherwise modified the Rakavy and Sawyer references to achieve the invention of claim 1. The Sawyer reference is outside the art relating to controlling a data transfer. As such, there is no apparent reason to combine the Sawyer reference because the Sawyer reference is intended for a different type of problem in a different area of art. The Rakavy reference is concerned with limiting a download to periods of low line utilization (based on percentage of time that a communications line is busy), while the Sawyer reference is concerned with determining a total bandwidth use for a communication for billing purposes. The Examiner has not identified any problems with the technique of the system in the Rakavy reference itself, nor does the Rakavy reference itself suggest any shortcoming with how it finds a threshold. No teaching of the Rakavy or Sawyer references or elsewhere suggests that

the system in the Sawyer reference would improve a system such as in the Rakavy reference, and nothing in the references or elsewhere suggest a need for any particular improvement to the system in the Rakavy reference.

Further, Applicants respectfully submit that modification of the Rakavy reference with the Sawyer reference suggested by the Office Action is improper as the modification would change the principle of operation of the system in the Rakavy reference. “If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).” MPEP § 2143.01. The principle of operation of the system in the Rakavy reference is to transmit information during periods of low line utilization that occurs when the communications line is busy no more than a predetermined percentage of the time. *See, e.g., Rakavy*, col. 13, lines 11-12, and lines 35-36. To modify the Rakavy reference in an attempt to achieve the invention of claim 1 would change the principle of operation of the Rakavy reference because instead of relying on the percentage of time that a communications line is busy, the system would set a threshold based on an identified maximum monitored level of actual bandwidth utilization and use that threshold for determining when to transfer data. As a result, the modification would allow data to be transferred at times when it would not be allowed using the system in Rakavy. Accordingly, Applicants respectfully submit that the modification would change the principle of operation of the system in the Rakavy reference, and thus there is no suggestion or motivation to modify the Rakavy reference to achieve the invention of claim 1.

Accordingly, Applicants respectfully submit that independent claim 1 is patentable over the Rakavy and Sawyer references for at least the reasons described hereinabove.

As such, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of independent claim 1. Each of claims 2-9, 14-21, 29, and 30 depends, either directly or indirectly, from independent claim 1, and accordingly, these claims are believed to be in condition for allowance for at least the above-cited reasons.

2) Claims 22-24

Referring now to claims 22-24, as noted above, independent claim 22 is directed to a computer-storage medium have stored thereon a data structure. *Id.* at p. 6, line 16 through p. 8, line 9; p. 13, lines 19-23. The data structure includes a first data field containing data representing a maximum monitored level, wherein the maximum monitored level is a maximum of a monitored level of actual network bandwidth utilization. *Id.* at p. 12, lines 10-14; p. 13, line 19 through p. 14, line 2; p. 16, lines 8-12. Additionally, the data structure includes a second data field containing data representing a threshold level of network bandwidth utilization below which data may be transferred over the network without interfering with other network activity, wherein the second data field is derived from the first data field by calculating the threshold level as a function of the maximum monitored level. *Id.* at p. 12, lines 10-14; p. 13, line 19 through p. 14, line 2; p. 16, lines 12-16.

On page 8 of the Office Action dated 1/10/2008, the Examiner rejected claims 22-24 for “similar reasons as stated above,” presumably referring to the rejection of claims 1, 3, and 5 and the combination of the Rakavy and Sawyer references. Applicants respectfully traverse the obviousness rejection of claims 22-24 because the Rakavy and Sawyer references, either alone or in combination, fail to teach or suggest all the claim limitations for each of these claims. In particular, the references fail to teach or suggest a computer-storage medium having a data structure as that recited in independent claim 22. For instance, the Rakavy and Sawyer

references, either alone or in combination, fail to teach or suggest a data structure that includes “a second data field containing data representing a threshold level of network bandwidth utilization below which data may be transferred over the network without interfering with other network activity, wherein the second data field is derived from the first data field by calculating the threshold level as a function of the maximum monitored level” as recited by independent claim 22. The threshold used in the Rakavy reference is based on a predetermined percentage of time a communications line is busy as opposed to being calculated as a function of a maximum monitored level. This difference is significant as noted hereinabove and in Applicants’ specification at page 16, line 18 through page 17, line 1. The Sawyer reference also fails to cure the deficiency of the Rakavy reference with respect to this limitation. As previously noted, the Sawyer reference is concerned with calculating billing charges based on total bandwidth use for a communication. The Sawyer reference simply fails to teach or suggest any threshold level of network bandwidth utilization below which data may be transferred without interfering with other network activity.

Moreover, there is no apparent reason to combine the Rakavy and Sawyer references to achieve the invention of claims 22-24 and the combination is improper for at least the same reasons as noted above with respect to independent claim 1.

Accordingly, Applicants respectfully submit that independent claim 22 is patentable over the Rakavy and Sawyer references for at least the reasons described hereinabove. As such, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of independent claim 22. Each of claims 23 and 24 depends from independent claim 22, and accordingly, these claims are believed to be in condition for allowance for at least the above-cited reasons.

3) *Claims 25-27*

Turning now to claims 25-27, independent claim 25 is directed to a computer-storage medium having computer-executable components for managing the transfer of data over a network. The components include a bandwidth monitoring component, a threshold calculating component, and a transfer management component. The bandwidth monitoring component monitors the level of actual bandwidth utilization for a network connection of the local computing device by periodically sampling an amount of incoming and outgoing data transferred over a given time period for data sets greater than a predetermined size threshold, and identifies a maximum monitored level, wherein the maximum monitored level is a maximum of the monitored level of actual bandwidth utilization for the network connection. *Id.* at p. 14, lines 15-20; p. 16, lines 8-12. The threshold calculating component calculates a threshold level of utilization as a function of the maximum monitored level of utilization identified by the bandwidth monitoring component. *Id.* at p. 16, lines 12-17. The transfer management component manages the transfer of data over the network when the level of actual bandwidth utilization is less than the threshold level of utilization. *Id.* at p. 17, lines 4-14.

Initially, Applicants note that claim 25 has been amended herein to recite features indicated by the Examiner in the Office Action as allowable subject matter. In particular, claim 25 has been amended to recite “a bandwidth monitoring component which: monitors the level of actual bandwidth utilization for a network connection of the local computing device by periodically sampling an amount of incoming and outgoing data transferred over a given time period for data sets greater than a predetermined size threshold.” These recitations correspond with the description in the Specification at page 14, line 15 to page 15, line 3. Because claim 25 has been amended to recite the features indicated as allowable subject matter, Applicants

respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of independent claim 25 and allowance of the claim.

Additionally, Applicants respectfully submit that the Rakavy and Sawyer references fail to render the invention of claim 25 obvious for at least the reasons set forth below.

On page 8 of the Office Action dated 1/10/2008, the Examiner rejected claims 25-27 for “similar reasons as stated above,” presumably referring to the rejection of claims 1, 3, and 5 and the combination of the Rakavy and Sawyer references. Applicants traverse the obviousness rejection of claims 25-27 because the Rakavy and Sawyer references, either alone or in combination, fail to teach or suggest all the claim limitations for each of these claims.

The Rakavy and Sawyer references, either alone or in combination, fail to teach or suggest a “threshold calculating component which calculates a threshold level of utilization as a function of the maximum monitored level of utilization identified by the bandwidth monitoring component” as recited by independent claim 25. As noted above with respect to independent claim 1, the threshold used in the Rakavy reference is based on a predetermined percentage of time a communications line is busy as opposed to being calculated as a function of a maximum monitored level. This difference is significant as noted hereinabove and in Applicants’ specification at page 16, line 18 through page 17, line 1. The Sawyer reference also fails to cure the deficiency of the Rakavy reference with respect to this limitation. As previously noted, the Sawyer reference is concerned with calculating billing charges based on total amount of bandwidth used for a communication. The Sawyer reference simply fails to teach or suggest any threshold level of utilization that is calculated based on a maximum monitored level of actual network bandwidth utilization.

Further, the Rakavy and Sawyer references, either alone or in combination, fail to teach or suggest “a transfer management component which manages the transfer of data over the network when the level of actual bandwidth utilization is less than the threshold level of utilization” as recited by independent claim 25. Because the Rakavy and Sawyer references fail to teach or suggest a bandwidth monitoring component and threshold calculating component that provide a threshold level based on a maximum monitored level of utilization, the references similarly fail to teach or suggest a transfer management component that employs such a threshold level to manage the transfer of data.

Moreover, there is no apparent reason to combine the Rakavy and Sawyer references to achieve the invention of claims 25-27 and the combination is improper for at least the same reasons as noted above with respect to independent claim 1.

Accordingly, Applicants respectfully submit that independent claim 25 is patentable over the Rakavy and Sawyer references for at least the reasons described hereinabove. As such, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of independent claim 25. Each of claims 26 and 27 depends from independent claim 25, and accordingly, these claims are believed to be in condition for allowance for at least the above-cited reasons.

4) Claim 31

Claim 31 is directed to a method for a computer to regulate a data transfer between the computer and a network through which the computer communicates. The method includes monitoring a changing rate of amount of data communicated between the network and the computer by periodically sampling an amount of incoming and outgoing data transferred between the network and the computer over a given time period. A changing maximum of the

rate of amount of data communicated between the network and the computer is repeatedly determined. Additionally, a changing threshold rate of data communication is repeatedly determined based on the changing maximum rate of amount of data communicated between the network and the computer. Whether to resume or suspend the data transfer between the network and the computer is further repeatedly determined based on the changing threshold rate of data communication and based on the changing rate of amount of data communicated between the computer and the network, and resuming or suspending the data transfer accordingly until the data transfer is complete.

On page 8 of the Office Action dated 1/10/2008, the Examiner rejected claim 31 for “similar reasons as stated above,” presumably referring to the rejection of claim 1 and the combination of the Rakavy and Sawyer references. Applicants traverse the obviousness rejection of claim 31 because the Rakavy and Sawyer references, either alone or in combination, fail to teach or suggest all the claim limitations for each of these claims.

The Rakavy and Sawyer references, either alone or in combination, fail to teach or suggest a “repeatedly determining a changing threshold rate of data communication based on the changing maximum rate of amount of data communicated between the network and the computer” as recited by independent claim 31. As noted above with respect to independent claim 1, the threshold used in the Rakavy reference is based on a predetermined percentage of time a communications line is busy as opposed to being calculated as a function of a maximum rate of amount of data communicated between the network and the computer. This difference is significant as noted hereinabove and in Applicants’ specification at page 16, line 18 through page 17, line 1. The Sawyer reference also fails to cure the deficiency of the Rakavy reference with respect to this limitation. As previously noted, the Sawyer reference is concerned with

calculating billing charges based on a total amount of bandwidth used for a communication. The Sawyer reference simply fails to teach or suggest any threshold level of utilization that is calculated based on a maximum rate of amount of data communicated between the network and the computer.

Further, the Rakavy and Sawyer references, either alone or in combination, fail to teach or suggest “repeatedly determining whether to resume or suspend the data transfer between the network and the computer based on the changing threshold rate of data communication and based on the changing rate of amount of data communicated between the computer and the network, and resuming or suspending the data transfer accordingly until the data transfer is complete” as recited by independent claim 31. Because the Rakavy and Sawyer references fail to teach or suggest the above-noted features of claim 31 including determining a changing maximum and a changing threshold, the references similarly fail to teach or suggest a resuming or suspending a data transfer based on such parameters.

Moreover, there is no apparent reason to combine the Rakavy and Sawyer references to achieve the invention of claim 31 and the combination is improper for at least the same reasons as noted above with respect to independent claim 1.

Accordingly, Applicants respectfully submit that independent claim 31 is patentable over the Rakavy and Sawyer references for at least the reasons described hereinabove. As such, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of independent claim 31.

C. Rejection based on Rakavy, Sawyer, and Watanabe

Claim 10 was rejected under 35 U.S.C. § 103(a) as being obvious over the Rakavy reference in view of the Sawyer reference and further in view of the Watanabe reference.

Applicants traverse the obviousness rejection of claim 10 because the Rakavy, Sawyer, and Watanabe references, either alone or in combination, fail to teach or suggest all the claims limitations for claim 10. Dependent claim 10 depends indirectly from independent claim 1, which includes limitations not taught or suggested by the Rakavy and Sawyer references as described hereinabove. The addition of the Watanabe reference does not cure these deficiencies as the Watanabe reference similarly fails to teach or suggest these limitations. Further, there is no apparent reason to combine or modify the Rakavy, Sawyer, and Watanabe references in the manner set forth in the Office Action dated 1/10/2008. Accordingly, the 103(a) rejection of claim 10 is improper for at least the reasons stated above, and Applicants respectfully request that the withdrawal of the 103(a) rejection of claim 10.

D. Rejection based on Rakavy, Sawyer, and Elzur

Claim 12 was rejected under 35 U.S.C. § 103(a) as being obvious over the Rakavy reference in view of the Sawyer reference and further in view of the Elzur reference. Applicants traverse the obviousness rejection of claim 12 because the Rakavy, Sawyer, and Elzur references, either alone or in combination, fail to teach or suggest all the claims limitations for claim 12. Dependent claim 12 depends indirectly from independent claim 1, which includes limitations not taught or suggested by the Rakavy and Sawyer references as described hereinabove. The addition of the Elzur reference does not cure these deficiencies as the Elzur reference similarly fails to teach or suggest these limitations. Further, there is no apparent reason to combine or modify the Rakavy, Sawyer, and Elzur references in the manner set forth in the Office Action dated 1/10/2008. Accordingly, the 103(a) rejection of claim 12 is improper for at least the reasons stated above, and Applicants respectfully request that the withdrawal of the 103(a) rejection of claim 12.

E. Rejection based on Rakavy, Sawyer, and Kalkunte

Claim 13 was rejected under 35 U.S.C. § 103(a) as being obvious over the Rakavy reference in view of the Sawyer reference and further in view of the Kalkunte reference. Applicants traverse the obviousness rejection of claim 13 because the Rakavy, Sawyer, and Kalkunte references, either alone or in combination, fail to teach or suggest all the claims limitations for claim 13. Dependent claim 13 depends indirectly from independent claim 1, which includes limitations not taught or suggested by the Rakavy and Sawyer references as described hereinabove. The addition of the Kalkunte reference does not cure these deficiencies as the Kalkunte reference similarly fails to teach or suggest these limitations. Further, there is no apparent reason to combine or modify the Rakavy, Sawyer, and Watanabe references in the manner set forth in the Office Action dated 1/10/2008. Accordingly, the 103(a) rejection of claim 13 is improper for at least the reasons stated above, and Applicants respectfully request that the withdrawal of the 103(a) rejection of claim 13.

F. Rejection based on Buch, Rakavy, and Sawyer

Claim 28 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,463,468 to Buch (the “Buch reference”) in view of the Rakavy and Sawyer references. The Buch reference discloses a technique for free Internet access which involves a method for downloading video advertising files when a user is not actively using the Internet connection. As shown in FIG. 11 and described at column 12, Buch’s method determines the ad block size based on the available data rate and perhaps also based on system resources. If the Internet connection is being used (e.g., to download content or to send/receive email), the method checks the availability of the connection again later. However, if the Internet connection is not being used, a request is sent to the ad server for information such as the file name, the

offset from the file start where the block should be downloaded, and the determined ad block size.

The method in the Buch reference differs from that of Applicants' invention of claim 28 in that Buch's method does not request and download data in the background during other network activity. The method in the Buch reference does not request and download data when the actual network bandwidth utilization is less than a threshold level that is calculated as a function of a maximum monitored level of actual network bandwidth utilization. Instead, the method in the Buch reference only requests and downloads data when the user is not actively using the Internet connection. These are substantial differences because the downloading of data using the invention of claim 28 is not limited to times when the user's Internet connection is not being actively used as discussed in the Buch reference. This is a significant difference as the invention of claim 28 provides a benefit over the method in the Buch reference in that data may be downloaded while other network activity occurs. The Examiner acknowledges that the Buch reference fails to teach or suggest multiple limitations of independent claim 28 (*see, e.g., Office Action dated 1/10/2008*, p. 12), but minimizes the extent of the differences between the invention of claim 28 and the Buch reference as noted above.

The Rakavy and Sawyer references were relied on by the Examiner in an attempt to demonstrate that the differences between the invention recited by claim 28 and the Buch reference are merely obvious differences. However, the Examiner's conclusion is based on not only an incorrect understanding of Applicants' invention of claim 28 with respect to the Buch reference as noted above, but an incorrect understanding of what is taught by the Rakavy and Sawyer references. As noted above with respect to the obviousness rejection of claims 1-9, 14-27, and 29-30, the Rakavy and Sawyer references, either alone or in combination, fail to teach or

suggest using a threshold level of utilization that is calculated based on an identified maximum monitored level of actual bandwidth utilization. Accordingly, the Buch, Rakavy, and Sawyer references, either alone or in combination, fail to teach or suggest the method of claim 28. Moreover, there is no apparent reason to combine or modify the Buch, Rakavy, and Sawyer references in the manner set forth in the Office Action dated 1/10/2008. Accordingly, Applicants traverse and request withdrawal of the 103(a) rejection of independent claim 28.

CONCLUSION

For at least the reasons stated above, claims 1-10 and 12-31 are in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of claims 1-10 and 12-31. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned by telephone prior to issuing a subsequent action. The Commissioner is hereby authorized to charge any underpayment amount required, or refund any overpayment amount, to Deposit Account No. 19-2112.

Respectfully submitted,

/John S. Golian/

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